

**ABSTRACT OF THE DISCLOSURE**

After a lower electrode made of Pt, for example, has been formed, impurity atoms (e.g., hydrogen atoms) which suppress decrease in stiffness of the electrode at a high temperature are introduced into the lower electrode. Then, even when the lower electrode is heated to a high temperature in an oxidizing atmosphere in the subsequent process step of forming a capacitive insulating film of e.g., BST on the lower electrode, the decrease in stiffness of the lower electrode is suppressible. Accordingly, it is possible to prevent the deformation of the lower electrode, which might otherwise result from the coagulation of metal atoms such as Pt atoms in the lower electrode.